

Low Pathogenic Avian Influenza Virus

Worldwide, there are many strains of avian influenza (AI) virus that can cause varying amounts of clinical illness in poultry. AI viruses can infect chickens, turkeys, pheasants, quail, ducks, geese, and guinea fowl, as well as a wide variety of other birds.

AI viruses can be classified into low pathogenic and highly pathogenic forms based on the severity of the illness they cause. Most AI virus strains are low pathogenic and typically cause little or no clinical signs in infected birds. The Organization of Epizootics, an international body that classifies and regulates animal disease, considers low pathogenic avian influenza to be a low risk disease and does not require it to be reported. Low pathogenic avian influenza also poses no threat to human health.

Introduction and Spread

Low pathogenic avian influenza is spread primarily through direct contact between healthy birds and infected birds, and through indirect contact with contaminated equipment and materials. The virus is excreted through infected birds' feces and secretions from the nose, mouth, and eyes.

Diagnosing the Virus

Serological testing is used as a preliminary screening method for detecting all AI viruses. Once it is determined that an AI virus is present, the virus is cultured to determine its subtype and pathogenicity. This subtyping is necessary because some low pathogenic subtypes have the capacity to mutate into more virulent strains. Symptoms of low pathogenic are typically mild and in many cases not present. The disease, however, can manifest itself through depression, decreased food consumption, respiratory signs (coughing and sneezing), and a decrease in egg production.

Cleaning and Disinfection

To prevent a possible outbreak of low pathogenic avian influenza, poultry producers must use special preventative measures and precautions on the farm. If low pathogenic avian influenza is detected, farms must be thoroughly cleaned and disinfected. Low pathogenic avian influenza is inactivated by heat and drying. It is also very sensitive to most disinfectants and detergents. In order to ensure that the cleaning and disinfecting process is thorough, however, the area to be disinfected must be clear of organic material.

Foreign Strain Prevention

USDA requires that imported birds (poultry, pet birds, birds exhibited at zoos, and ratites) be quarantined and tested for the avian influenza virus before entering the country. This precaution is taken to prevent foreign strains of AI from being introduced in the United States.

Additional Information

For more information about avian influenza or biosecurity practices, contact:

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